Agreement on the Conservation of Albatrosses and Petrels

An Update on the Status and Trends of Albatrosses and Petrels Listed Under Annex 1 of the ACAP Agreement

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INTRODUCTION

There are many species of seabirds that have been recorded as bycatch in pelagic longline fisheries. The majority of these, both in terms of species and numbers caught, are albatrosses and petrels (Anderson *et al*. 2011; Ryan *et al*. 2002). Of the 22 species of albatrosses found globally, 18 occur in the Southern Bluefin Tuna (SBT) fishery, as do all seven of the petrel species listed under the Agreement on the Conservation of Albatrosses and Petrels (ACAP). This paper provides asummary of the status and trends of albatross and petrel species listed under Annex 1 of ACAP that breed and/or forage in areas where Southern Bluefin tuna are fished.

CONSERVATION STATUS

Of the18species of albatrosses found in the SBT fishery, the International Union for Conservation of Nature (IUCN)lists:

- two as *Critically Endangered* (CR),
- five as *Endangered* (EN),
- seven as *Vulnerable* (VU) and
- four as *Near Threatened* (NT).

Of the seven ACAP petrel species,

- four are listed as VU,
- one as NT and
- two as *Least Concern* (LC).

Annex 1below summarises status and trend information for these species. The information has been drawn from data submitted to the ACAP database(data.acap.aq),as well as from the IUCN Red List of Threatened Species(www.iucnredlist.org).More information can also be found inthe species assessments developed by ACAP(http://www.acap.aq/acap-species) which provide comprehensive and current information on the conservation status, biology and threats facing all ACAP species.

STATUS OF KNOWLEDGE RELATING TO POPULATION SIZE AND TRENDS

Comprehensive knowledge of population size, trend and demographic parameters are fundamental to many aspects of albatross and petrel conservation, and vital to monitoring the effectiveness of management actions. Although the size of most populations has been determined at some point in time, the trend and current demographic statistics for many populations are not known, due to the high level of resources required to access remote sites at appropriate intervals.Determination of global trends canalso be difficult because populations within a species may show different trajectories at different sites.

Estimates of bycatch in global longline fisheries indicate that between160,000 – 320,000 seabirds, mostly albatrosses, petrels and shearwaters, are killed each year (Anderson ***et al.*** 2011). These estimates may be understated by as much as 50% or more due to lack of observer data or under-reporting (Anderson ***et al.*** 2011). Such levels of incidental mortality are known to haveresulted in or are contributing to population declines for a number of thesespecies (e.g. Wanless***et al.*** 2009;Weimerskirch***et al.*** 1997).

At the most recent meeting of ACAP's Advisory Committee in August 2011, ACAP and BirdLife International (a partner organization contributing to the IUCNRed List of Threatened Species) agreed to work together on the re-evaluation of the global trends of ACAP species in 2012. This analysis will draw on the population data held in the ACAP database, and will provide a more comprehensive evaluation of the status and trends of species listed under the Agreement. This information will be provided to the next meeting of the ERSWG.

REFERENCES

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ANNEX 1. 2011 SUMMARY OF STATUS AND TRENDSOF ACAP ALBATROSS AND PETREL SPECIES BREEDING/FORAGING IN THE SBTFISHERY AREA.

IUCN Status: *CR =Critically Endangered, EN = Endangered, VU = Vulnerable, NT = Near Threatened, LC = Least Concern*
Site: *usually an entire, distinct island or islet, or section of a large island*
Breeding Frequency: *A = Annual, B = Biennial*
Trend: *↑ increasing, ↓declining, ↔ stable, ? unknown*

Common name	Scientific name	Number of sites (ACAP)	Single Country Endemic	Breeding Frequency	Annual breeding pairs (ACAP) [1]	IUCN Status 2011	IUCN Trend	IUCN Justification [2]	ACAP notes
Amsterdam Albatross	*Diomedea amsterdamensis*	1	France	B	30	CR	↓	Extremely small population, confined to a tiny area on one island. Although the population has increased since the 1980s, it is believed to have suffered severe declines in the 1970s, and so, over three generations (c.82 years), has almost certainly declined overall. A continuing decline is projected owing to the impact of a disease which is probably already causing chick mortality.	
Tristan Albatross	*Diomedea dabbenena*	1	UK	B	1,698	CR	↓	Extremely small breeding range and a projected extremely rapid population decline over three generations (70 years). Modelled population declines are a consequence of very low adult survival owing to incidental mortality in longline fisheries, compounded by low fledging success caused by predation of chicks by introduced mice.	
Atlantic yellow-nosed Albatross	*Thalassarche chlororhynchos*	6	UK	A	33,650	EN	↓	Very small breeding range and is estimated to be undergoing a very rapid ongoing decline projected over three generations (72 years) owing to incidental mortality in longline fisheries.	Need more recent data to confirm trend
Black-browed Albatross	*Thalassarche melanophris*	65		A	672,412	EN	↓	Estimated to be declining at a very rapid rate over three generations (65 years) on the basis of current rates of decline at some large breeding colonies in the south-west Atlantic. These declines have been attributed to the impact of incidental mortality in longline and trawl fisheries.	No trend data from southern Chile, where c. 20% of population breeds
Indian yellow-nosed Albatross	*Thalassarche carteri*	6		A	39,319	EN	↓	Estimated very rapid ongoing decline over three generations (71 years), based on data from the population stronghold on Amsterdam Island. This decline is the result of adult mortality and poor recruitment owing to interactions with fisheries and disease.	
Northern royal Albatross	*Diomedea sanfordi*	5	NZ	B	5,832	EN	↓	Restricted to a tiny breeding range in which severe storms in the 1980s resulted in a decrease in habitat quality, which led to poor breeding success. Therefore projected to undergo a very rapid decline over the next three	Need more recent data to confirm trend

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								generations (84 years). However, in spite of the extensive reduction in productivity over a 20 year period, the number of breeding pairs may have remained relatively stable. Additional data may lead to a review of threat status.	
Sooty Albatross	*Phoebetria fusca*	15		B	13,674	EN	↓	Very rapid decline over three generations (90 years), probably owing to interactions with fisheries. However, trends at three sites have been more severe, and the species could be uplisted to CR if these trends are found to be more general.	
Antipodean Albatross	*Diomedea antipodensis*	6	NZ	B	8,272	VU	↓	Largely confined to three small islands when breeding and is therefore highly susceptible to stochastic effects and human impacts. Recent data (2005-2008) from the Auckland Islands indicate declines in adult survival, productivity and recruitment, which, if confirmed by further monitoring, could result in a reclassification of EN or CR.	
Black Petrel	*Procellaria parkinsoni*	2	NZ	A	1,000	VU	↔	Breeds on just two very small islands where introduced predators are a potential threat. The population is assumed to be stable, but if a decline is detected, the species should be uplisted to EN.	Most recent data supports decline
Campbell Albatross	*Thalassarche impavida*	2	NZ	A	22,093	VU	↑	Breeding is restricted to a single location, where it is susceptible to potential human impacts and stochastic events. Although numbers decreased steeply between the 1970s and 1980s owing to interactions with fisheries, the population is now thought to be increasing, although there has not been a census since 1996.	Need recent data to confirm trend
Chatham Albatross	*Thalassarche eremita*	1	NZ	A	5,245	VU	↔	Very small breeding range rendering it susceptible to stochastic events and human impacts. Global population is either stable or increasing.	Most recent data supports stable trend
Grey-headed Albatross	*Thalassarche chrysostoma*	29		B	94,603	VU	↓	Declining at a rapid rate over three generations (90 years), probably largely owing to incidental mortality on longline fisheries. If the severe declines observed at some sites also occur elsewhere, the species would warrant uplisting to EN.	Need more data from Crozet, Kerguelen and southern Chile
Salvin's Albatross	*Thalassarche salvini*	12	NZ	A	31,874	VU	?	May have undergone a rapid decline, but different census methods make a comparison of the available data potentially misleading. However, breeding is largely restricted to one tiny island group, where it is susceptible to stochastic events.	
Southern royal Albatross	*Diomedea epomophora*	4	NZ	B	7,886	VU	↔	Very small range, breeding on four islands, although largely confined to just one, therefore highly susceptible to stochastic effects and human impacts.	
Spectacled	*Procellaria*	1	UK	A	14,400	VU	↑	Despite apparent population increases, significant numbers are caught as	Need accurate,

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Petrel	*conspicillata*							bycatch in longline fisheries, and, owing to its very small breeding range, it is highly susceptible to stochastic events and human activities.	continuous data to confirm trend
Wandering Albatross	*Diomedea exulans*	28		B	8,276	VU	↓	Overall, past and predicted future declines amount to a rapid population reduction over a period of three generations. This species is undergoing a rapid decline in the South Atlantic, as well as on the Crozet and Kerguelen Islands.Longline fishing is believed to be a main cause of decline, causing reductions in adult survival and juvenile recruitment, and this threat is ongoing.	
Westland Petrel	*Procellaria westlandica*	1	NZ	A	4,000	VU	↔	Restricted to one very small area when breeding, rendering the population highly vulnerable to stochastic events and other potential threats.	Need more data to confirm trend
White-chinned Petrel	*Procellaria aequinoctialis*	73		A	1,057,930	VU	↓	Suspected rapid declines, although almost no reliable estimates of historical populations exist. Very high rates of incidental mortality in longline fisheries are suspected in recent years; the probability that these circumstances will continue and its susceptibility to predation and loss of breeding habitat indicate a rapid and substantial population decrease is likely.	Need more data to confirm trend. Numbers not known for Prince Edward Islands and Antipodes.
Buller's Albatross	*Thalassarche bulleri*	10	NZ	A	29,948	NT	↔	Although the species is restricted to a tiny small area when breeding, the population is stable and the islands on which it breeds are moderately widely spread.	
Grey Petrel	*Procellaria cinerea*	17		A	79,570	NT	↓	Although there are no current trend data, this species is susceptible to introduced mammalian predators, and today it is the most commonly caught bycatch species in longline fisheries in New Zealand waters. Evidence from Gough Island, formerly thought to contain the largest population of this species, suggest that the species is likely to be subjected to considerable predation from introduced mice that are a major predator on other winter-breeding seabirds. The population on the Kerguelen Islands may also be in decline due to fishery bycatch. Based on these data a moderately rapid decline is suspected, but further data are urgently required in order to more accurately assess its population numbers and trends.	Need data for most sites, Prince Edward Islands numbers unknown.
Light-mantled Albatross	*Phoebetria palpebrata*	71		B	9,955	NT	↓	May be declining at a moderately rapid rate, owing to bycatch on longline fisheries and perhaps the impacts of introduced predators. Threats and population status both remain poorly known.	Need data for most sites. Numbers not known for Auckland Island or South Atlantic.
Shy Albatross	*Thalassarche*	3	Australia	A	12,842	NT	?	Breeds on just three islands and may be susceptible to stochastic events and	Albatross Island

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	cauta							human activities, although one nesting site is moderately widely separated from the other two.	stabilising after an increase, but less than half of historic size. PedraBranca declining. Largest population on Mewstone unknown.
White-capped Albatross	*Thalassarche steadi*	5	NZ	?	74,885	NT	↓	Trend of this species is poorly known. Given its longevity and slow productivity, and a high rate of mortality recorded in longline and trawl fisheries, it may be declining at a moderately rapid rate.	Most recent data indicates a decline
Northern Giant Petrel	*Macronectes halli*	50		A	10,856	LC	↑	Had been predicted to undergo a moderately rapid population decline in the near future but has instead shown a significant increase during the past two decades (probably owing to greater availability of carrion from expanding populations of fur seals, increased waste from commercial fishing operations, and the use of measures to reduce seabird bycatch around some breeding colonies).	Need more recent data for some sites
Southern Giant Petrel	*Macronectes giganteus*	119		A	47,156	LC	↓	Recent analysis of trend data for the global population over the past three generations (64 years) gives a best case estimate of a 17 % increase and a worst case scenario of a 7.2 % decline (Chown et al 2008 unpubl.report to SCAR).	

[1] ACAP database. <data.acap.aq>. 24 February 2012.
[2] IUCN 2011. *IUCN Red List of Threatened Species*. Version 2011.2. <www.iucnredlist.org>. Downloaded on 27 February 2012.